

What is claimed is:

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In an MPEG information distribution system, a method for forming a transport stream having a bitrate BR and including one or more programs, said method comprising the steps of:

defining N slots within said transport stream, each of said N slots being associated with a respective plurality of non-contiguous transport packets, each of said respective non-contiguous transport packets being separated by N-1 transport packets;

including, within said transport stream being formed, up to N transport encoded programs, where each transport encoded program is associated with one of said N slots and has a bitrate of BR/N ; and

in the case of less than N transport encoded programs being included within said transport stream being formed, including NULL transport packets within said transport stream being formed, said NULL packets forming NULL programs within said transport stream being formed.

2. A method for inserting a replacement packet into a transport stream formed according to the method of claim 1, said method for inserting comprising the steps of:

(1) examining a packet received from said transport stream to determine if said received packet comprises a NULL packet;

(2) inserting, into an output transport stream, said replacement packet if said received packet does comprise a NULL packet; and

(3) inserting, into said output transport stream, said received packet if said received packet does not comprise a NULL packet.

3. The method of claim 2, wherein said replacement packet is only inserted into said output transport stream if an timing condition is satisfied.

4. A method of replacing a program within a transport stream formed

according to the method of claim 1, said method for replacing a program comprising the steps of:

(1) examining a packet received from said transport stream to determine if a slot associated with said received packet corresponds to an insertion slot for said program to be inserted;

(2) inserting, into an output transport stream, a next packet of said replacement program if said slot associated with said received packet corresponds to an insertion slot for said program to be inserted;

(3) inserting, into said output transport stream, said received packet if said slot associated with said received packet does not correspond to an insertion slot for said program to be inserted; and

(4) repeating steps (1) through (3) for each packet of said transport stream until said replacement stream has been full inserted into said output transport stream.

5. The method of claim 4, wherein said replacement program comprises a NULL program.

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